IN THE CLAIMS

Please amend the claims as follows:

Claims 1 -15 (Canceled).

Claim 16 (Currently Amended): An AM receiver, comprising:

at least one IF filter with a fixed IF bandwidth; and

at least one down-conversion stage to shift the signal input thereto into an IF range,

wherein said at least one down-conversion stage has a variable oscillation frequency which is adjustable to detune a wanted center frequency of a wanted signal part from a center frequency of said at least one IF filter so that an unwanted signal part adjacent to said wanted signal part lies outside said fixed IF bandwidth, and

said AM receiver is configured and adapted for adjusting said variable oscillation frequency on the basis of a feedback signal supplied downstream from said down-conversion stage in order to shift said wanted center frequency toward a higher frequency within a passband of said at least one IF filter so as to at least partially remove said unwanted signal part.

Claim 17 (Previously Presented): The AM receiver according to claim 16, wherein said AM receiver is configured and adapted for detecting said unwanted signal part by:

analyzing the power of FFT carriers outside the wanted signal part; or

bit error rate fine tuning in a digital baseband processing; or

Claim 18 (Previously Presented): The AM receiver according to claim 16, further comprising a baseband processing stage which readjusts the detuned IF signal to a predetermined center frequency.

Claim 19 (Previously Presented): The AM receiver according to claim 18, wherein said baseband processing stage performs digital operations.

Claim 20 (Previously Presented): The AM receiver according to claim 18, comprising

a PLL circuit for adjusting said variable oscillation frequency,

wherein said baseband processing stage supplies said feedback signal to said PILL circuit.

Claim 21 (Previously Presented): The AM receiver according to claim 16, wherein said at least one down-conversion stage detunes the IF signal and readjusts the detuned IF signal to a predetermined center frequency.

Claim 22 (Previously Presented): The AM receiver according to claim 16, wherein the AM receiver is a digital shortwave receiver.

Claim 23 (Previously Presented): The AM receiver according the claim 22, wherein the digital shortwave receiver is a Digital Radio Mondial receiver.

Claim 24 (Previously Presented): The AM receiver according to claim 16, wherein said at least one IF filter is an analog filter.

Claim 25 (Previously Presented): The AM receiver according to claim 16, wherein said fixed IF bandwidth is 20 kHz.

Claim 26 (Previously Presented): A method to process a received and optionally processed AM signal, comprising the steps of

detuning, by means of a down conversion stage, a wanted center frequency of a wanted signal part from a center frequency used during at least one IF filtering with a fixed IF bandwidth so that an unwanted signal part adjacent to said wanted signal part lies outside said fixed IF bandwidth; and

adjusting, on the basis of a feedback signal obtained downstream from said down-conversion stage, a frequency to which said wanted center frequency is detuned, such that said wanted center frequency is shifted toward a higher frequency within a passband of said fixed IF bandwidth to remove at least a portion of said unwanted signal part.

Claim 27 (Previously Presented): The method according to claim 26, comprising the step of detecting said unwanted signal part by:

analyzing the power of FFT carriers outside the wanted signal part; or

bit error rate fine tuning in a digital baseband processing; or

optimizing an automatic gain control voltage.

Claim 28 (Previously Presented): The method according to claim 26, further comprising the step of readjusting the detuned IF signal to a predetermined center frequency after said at least one IF filtering.

Claim 29 (Previously Presented): The method according to claim 26, used for digital shortwave reception.

Claim 30 (Currently Amended): The method according to claim 29, used for Digital Radio Mondial ~~recepetion~~ reception.

Claim 31 (Previously Presented): An AM receiver comprising:

an IF filter having a fixed bandwidth and a predetermined center frequency;

a down-conversion stage, arranged upstream from said IF filter, configured and adapted to receive an input signal having a desired signal component having a center frequency; and

a feedback path for supplying a control signal to said down-conversion stage on the basis of a feedback signal obtained downstream from said down-conversion stage,

wherein said AM receiver is configured and adapted for shifting, by means of said down-conversion stage, said input signal into an IF range on the basis of said control signal such that said center frequency of said shifted input signal is detuned from said center frequency of said IF filter.

Claim 32 (Previously Presented): The AM receiver of claim 31, wherein said AM receiver is configured and adapted for setting said detuned center frequency to a first center frequency and for determining said first center frequency by:

analyzing the power of FFT carriers outside the wanted signal part; or

bit error rate fine tuning in a digital baseband processing; or

optimizing an automatic gain control voltage.

Claim 33 (Previously Presented): The AM receiver of claim 31, further comprising a baseband processing stage, arranged downstream from said IF filter, configured and adapted to shift said detuned input signal to said center frequency of said IF filter.

Claim 34 (Previously Presented): The AM receiver of claim 33,

wherein said feedback path comprises a PLL circuit for supplying said control signal, and

said baseband processing stage supplies said feedback signal to said PLL circuit.

Claim 35 (Previously Presented): An AM receiver comprising:

an IF filter having a fixed bandwidth;

a down-conversion stage, arranged upstream from said IF filter, configured and adapted to receive an input signal having a desired signal component and an undesired signal component adjacent said desired signal component in the frequency domain; and

a feedback path for supplying a control signal to said down-conversion stage on the basis of a feedback signal obtained downstream from said down-conversion stage,

wherein said AM receiver is configured and adapted for shifting, by means of said down-conversion stage, said input signal into an IF range on the basis of said control signal such that said undesired signal component lies at least partially outside said bandwidth of said IF filter, such that said wanted center frequency is shifted toward a higher frequency within a passband of said IF filter to remove at least a portion of said unwanted signal part.

Claim 36 (Previously Presented): The AM receiver of claim 35, wherein said AM receiver is configured and adapted for detecting said undesired signal component by:

analyzing the power of FFT carriers outside the wanted signal part; or

bit error rate fine tuning in a digital baseband processing; or

optimizing an automatic gain control voltage.

Claim 37 (Previously Presented): The AM receiver of claim 35,

wherein said IF filter has a predetermined center frequency,

said desired signal component has a center frequency, and

said AM receiver is configured and adapted for shifting, by means of said down-conversion stage, said input signal into said IF range such that said center frequency of said shifted input signal is detuned from said center frequency of said IF filter.

Claim 38 (New): An AM receiver, comprising:

at least one IF filter with a fixed IF bandwidth; and

at least one down-conversion stage to shift the signal input thereto into an IF range,

wherein said at least one down-conversion stage has a variable oscillation frequency which is adjustable to detune a wanted center frequency of a wanted signal part from a center frequency of said at least one IF filter so that an unwanted signal part adjacent to said wanted signal part lies outside said fixed IF bandwidth, and

said AM receiver is configured and adapted for adjusting said variable oscillation frequency on the basis of a feedback signal supplied downstream from said down-conversion stage in order to shift said wanted center frequency toward a higher or lower edge of the passband of said at least one IF filter so as to at least partially remove said unwanted signal part.

Claim 39(New): The AM receiver according to claim 38, wherein said AM receiver is configured and adapted for detecting said unwanted signal part by:

analyzing the power of FFT carriers outside the wanted signal part; or

bit error rate fine tuning in a digital baseband processing; or

Claim 40 (New): The AM receiver according to claim 38, further comprising a baseband processing stage which readjusts the detuned IF signal to a predetermined center frequency.

Claim 41 (New): The AM receiver according to claim 40, wherein said baseband processing stage performs digital operations.

Claim 42 (New): The AM receiver according to claim 40, comprising

a PLL circuit for adjusting said variable oscillation frequency,

wherein said baseband processing stage supplies said feedback signal to said PILL circuit.

Claim 43 (New): The AM receiver according to claim 38, wherein said at least one down-conversion stage detunes the IF signal and readjusts the detuned IF signal to a predetermined center frequency.

Claim 44 (New): The AM receiver according to claim 38, wherein the AM receiver is a digital shortwave receiver.

Claim 45 (New): The AM receiver according the claim 44, wherein the digital shortwave receiver is a Digital Radio Mondial receiver.

Claim 46 (New): The AM receiver according to claim 38, wherein said at least one IF filter is an analog filter.

Claim 47 (New): The AM receiver according to claim 38, wherein said fixed IF bandwidth is 20 kHz.

Claim 48 (New): A method to process a received and optionally processed AM signal, comprising the steps of

detuning, by means of a down conversion stage, a wanted center frequency of a wanted signal part from a center frequency toward a higher or lower edge of the passband of said at least one IF bandwidth so that an unwanted signal part adjacent to said wanted signal part lies outside said fixed IF bandwidth; and

adjusting, on the basis of a feedback signal obtained downstream from said down-conversion stage, a frequency to which said wanted center frequency is detuned, such that said wanted center frequency is shifted toward a higher frequency within a passband of said fixed IF bandwidth to remove at least a portion of said unwanted signal part.

Claim 49 (New): The method according to claim 48, comprising the step of detecting said unwanted signal part by:

analyzing the power of FFT carriers outside the wanted signal part; or

bit error rate fine tuning in a digital baseband processing; or

optimizing an automatic gain control voltage.

Claim 50 (New): The method according to claim 48, further comprising the step of readjusting the detuned IF signal to a predetermined center frequency after said at least one IF filtering.

Claim 51 (New): The method according to claim 48, used for digital shortwave reception.

Claim 52 (New): The method according to claim 51, used for Digital Radio Mondial reception.

Claim 53 (New): An AM receiver comprising:

an IF filter having a fixed bandwidth and a predetermined center frequency;

a down-conversion stage, arranged upstream from said IF filter, configured and adapted to receive an input signal having a desired signal component having a center frequency; and

a feedback path for supplying a control signal to said down-conversion stage on the basis of a feedback signal obtained downstream from said down-conversion stage,

wherein said AM receiver is configured and adapted for shifting, by means of said down-conversion stage, said input signal into an IF range on the basis of said control signal such that said center frequency of said shifted input signal is detuned from said center frequency of said IF filter.

Claim 54 (New): The AM receiver of claim 53, wherein said AM receiver is configured and adapted for setting said detuned center frequency to a first center frequency and for determining said first center frequency by:

analyzing the power of FFT carriers outside the wanted signal part; or

bit error rate fine tuning in a digital baseband processing; or

optimizing an automatic gain control voltage.

Claim 55 (New): The AM receiver of claim 53, further comprising a baseband processing stage, arranged downstream from said IF filter, configured and adapted to shift said detuned input signal to said center frequency of said IF filter.

Claim 56 (New): The AM receiver of claim 55,

wherein said feedback path comprises a PLL circuit for supplying said control signal, and

said baseband processing stage supplies said feedback signal to said PLL circuit.

Claim 57 (New): An AM receiver comprising:

an IF filter having a fixed bandwidth;

a down-conversion stage, arranged upstream from said IF filter, configured and adapted to receive an input signal having a desired signal component and an undesired signal component adjacent said desired signal component in the frequency domain; and

a feedback path for supplying a control signal to said down-conversion stage on the basis of a feedback signal obtained downstream from said down-conversion stage,

wherein said AM receiver is configured and adapted for shifting, by means of said down-conversion stage, said input signal into an IF range on the basis of said control signal such that said undesired signal component lies at least partially outside said bandwidth of said IF filter, such that said wanted center frequency toward a higher or lower edge of the passband of said at least one IF filter to remove at least a portion of said unwanted signal part.

Claim 58 (New): The AM receiver of claim57, wherein said AM receiver is configured and adapted for detecting said undesired signal component by:

analyzing the power of FFT carriers outside the wanted signal part; or

bit error rate fine tuning in a digital baseband processing; or

optimizing an automatic gain control voltage.

Claim 59 (New): The AM receiver of claim 57,

wherein said IF filter has a predetermined center frequency,

said desired signal component has a center frequency, and

said AM receiver is configured and adapted for shifting, by means of said down-conversion stage, said input signal into said IF range such that said center frequency of said shifted input signal is detuned from said center frequency of said IF filter.